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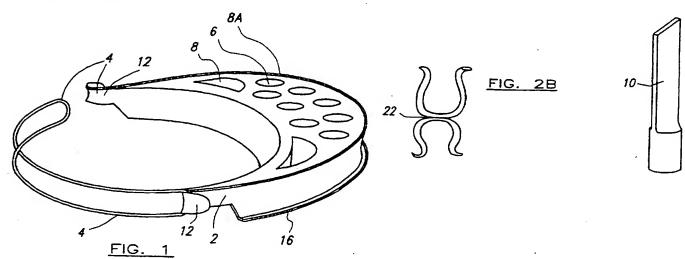
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GB 1439472 A GB 0956015 A **GB 0431014 A** GB 0406244 A GB 0337319 A

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## (54) Vacuum cleaner implement carrier

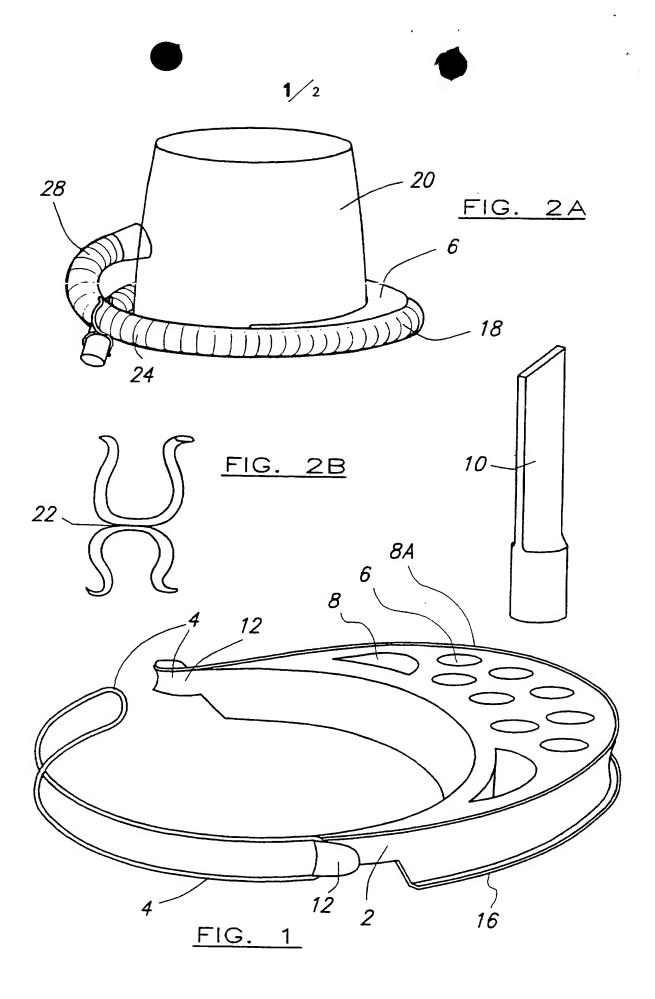
(57) A vacuum cleaner implement carrier comprises at least one aperture (8) which is shaped to allow an accessory tool or implement (eg 10) to be located and releaseably held therein. The implement carrier is either attached to the body of the vacuum cleaner by hooks (12) and an engagement band (4), or alternatively, it may be formed as an integral part of the vacuum cleaner itself. Location means for storing the flexible hose of the cleaner (not shown) comprise a channel (16) formed around the outer periphery of the implement carrier and a connector clip (22).

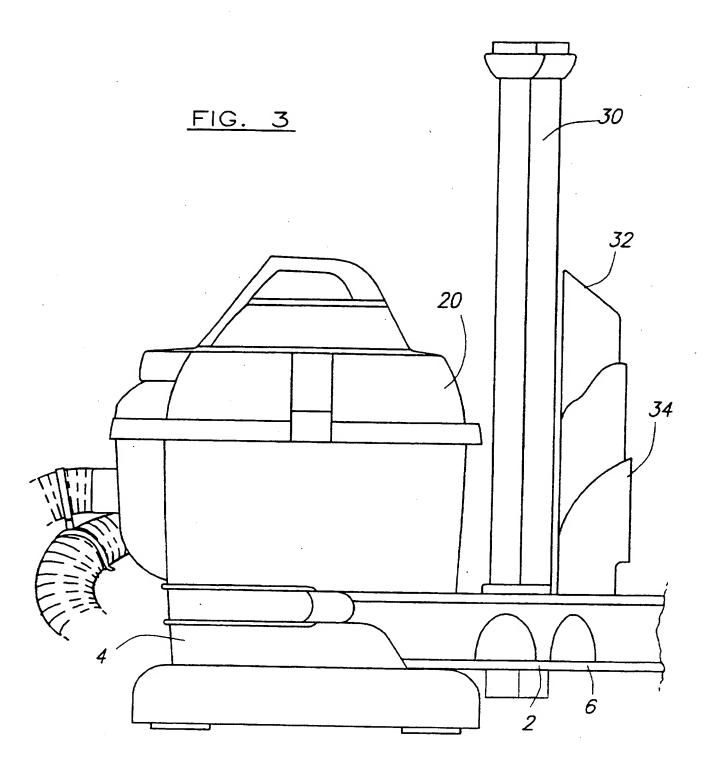


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At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995





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## Vacuum Cleaner Implement Carrier

The present application relates to a device for attachment to, or provided as an integral part of, a vacuum cleaner for carrying the various implements which can be used in conjunction with the cleaner to allow the same to be used for various cleaning work and in certain areas. In particular the device is for use with vacuum cleaners of the type known as cylinder cleaners, these cleaners being of a type which are mounted for movement on wheels and the vacuum cleaner components are mounted within the cylinder.

A well known type of cylinder cleaner is that sold under the trade name Vax and a common problem with this and other known cylinder cleaners is that although several tools and implements are provided to allow maximum utilisation of the same there is no facility on the cleaner for the storage of these implements when the same are not in use. This leads to the implements becoming lost or mislaid and even when their location is known their shape and dimensions lead to the same being difficult and awkward to store and move from place to place.

Furthermore the flexible connecting suction hose which connects the cylinder of the vacuum cleaner to the vacuum cleaner head is not easily stored and can be a hazard when the cleaner is not in use with the hose protruding from the area defined by the vacuum cleaner cylinder.

The aim of the present invention is to provide a device which allows the implements and/or the flexible hose for a cylinder vacuum cleaner to be stored in a position relative to the

cylinder of the vacuum cleaner so that the same can be held in an easily locatable and convenient position.

The present invention provides a device for the storage of implements and parts for a cylinder vacuum cleaner, wherein said device includes a plurality of apertures for the engageable location therein of said implements and parts to support the same in a releasable storage position during both use and storage of the said vacuum cleaner.

In one embodiment the number of apertures in the device is equivalent in number to the number of implements provided with the vacuum cleaner and to be stored on the device.

Typically the implements which can be located and stored in the device are any, or any combination, of vacuum cleaner pipe extensions, a vacuum cleaner head, a vacuum cleaner head nozzle, a vacuum cleaner head brush, or commonly used spare parts for the cleaner.

In a preferred embodiment the device protrudes radially in a horizontal plane from a portion of the side wall of the cylinder of the vacuum cleaner and typically at the side of the cylinder furthest from the outlet at which the flexible suction hose is connected.

In one embodiment the device is further provided with means for the attachment of a portion of the flexible suction hose thereon thereby providing a location means in order that the hose can be connected in the desired position when not in use.

Typically the device includes a channel defined around the outer periphery of the same and said channel acts as a loca-

tion means for the flexible hose. The device is also provided with a clip which connects with the hose on a first loop and the hose on a second loop to keep the same in a stored looped format.

In a further embodiment the device includes location means for at least one of the prongs of a plug thereby ensuring that the plug can also be stored on the device when the cleaner is not in use.

In one form the device is provided as an integral part of the moulding of the vacuum cleaner cylinder or in an alternative form the device is provided with an engaging band which passes around one side of the cylinder to connect with the device at the other side and maintains the same in the fixed position on the cylinder. In this form the engaging band can be any of a rubber band or a steel band attached to the device by means of a toggle lock which, when moved to a locking position, tensions the band to lock the device in position.

A specific embodiment of the invention will now be described with reference to the accompanying drawings wherein;

Figure 1 illustrates a perspective view of the device;

Figure 2A illustrates a perspective view of the device in relation with a flexible hose;

Figure 2B illustrates a connector clip of the invention; and

Figure 3 illustrates in elevation the device fixed to the cylinder of the vacuum cleaner.

Referring firstly to Figure 1 there is shown a device 2 of the invention. The device 2 is formed from a plastics material and in the form shown is provided with fitment means 4 which allow the same to be attached around the cylinder of a cylinder vacuum cleaner. The device includes a planar section 6 which when fitted extends in a horizontal plane from the cylinder. The section 6 includes therein a plurality of engagement apertures 8, each of which is shaped to allow a tool or implement for use with the vacuum cleaner to be located and releasably held therein. In this case and for illustration there is shown a vacuum cleaner head nozzle 10 which is placed in the aperture 8A when not in use.

Although not shown the device can also include apertures for the engagement of the prongs of an electric plug of the vacuum cleaner thereby providing an engagement means for the plug when the cleaner is not in use and ensuring that the same is kept in a stored position and is not trailing the cleaner.

The fitment means in this embodiment comprise hooks 12 provided one at each end of the planar section 6 and a band 14. The band is made from a plastics or rubber material and is of a size such that when the device is to be attached to the cylinder the band passes around one side of the same and engagement of the band with the hooks 12 provides the same in sufficient tension to maintain the device in a fixed position on the cylinder. In an alternative embodiment the band can be provided from a metal and tensioned by the provision of a toggle action lever which serves to lock the band in a tensioned position when the two hooks 12 are engaged. In a further alternative the device and the cylinder are provided with matching engagement means which allow the device to be located and engaged directly onto the cylinder.

The device is further provided with a channel 16 running around the outer periphery of the planar section 6. This channel serves to act as a locating means for a flexible suction hose 18 as shown in Figure 2A wherein the device 2 is shown attached to the cylinder 20 of a cylinder vacuum cleaner. The device also includes a connector clip 22 as shown in Figure 2B which serves to connect with a first loop 24 of the flexible hose adjacent the outlet 26 from the cylinder and a second loop 28 which has passed around the channel 16 of the device 2.

Referring now to Figure 3 the device 2 is shown in engagement with the cylinder 20 of the vacuum cleaner with the fitment means 4 holding the device in position. The planar section 6 is shown holding in this case a pipe extension piece 30, a vacuum cleaner head nozzle 32, a pipe bend portion 34 and the flexible suction hose 18 in the channel 16.

The device of the present invention therefore allows improved storage of the implements of a cylindrical vacuum cleaner when the same are not in use and allows the same to be stored on the cleaner thereby allowing the same to be selected for use easily and quickly. Thus the implements are not mislaid and do not cause problems in the storage of the same.

## **CLAIMS**

- 1 A device for the storage of at least one implement and/or part for a cylinder vacuum cleaner, said device including at least one aperture for the engagement and location of said implement and/or part to support the same in a releasable storage position until required to be used.
- 2. A device according to claim 1 wherein the number of apertures in the device is equivalent in number to the number of implements provided for use with the vacuum cleaner.
- 3. A device according to claim 1 wherein the parts and/or implements which can be stored in the device are any, or any combination, of vacuum cleaner pipe extensions, a vacuum cleaner head, a vacuum cleaner head nozzle, a vacuum cleaner head brush and/or commonly used spare parts for the cleaner.
- 4. A device according to claim 1 wherein the device protrudes outwardly and radially from one side of the cylinder in a plane substantially perpendicular to the longitudinal axis of the cylinder body.
- 5. A device according to claim 4 wherein the device is located on the side of the cylinder substantially opposite the outlet at which the flexible hose is connected.
- 6. A device for the storage of at least one implement or part for use with a cylinder vacuum cleaner said device mounted on said cylinder and wherein said device includes a location means for the location therewith of at least a portion of the flexible hose which connects the cylinder to the cleaner head.

- 7. A device according to claim 6 wherein the device includes a location means for the reception of the application head thereby allowing the storage of the hose and head in secured positions when not in use.
- 8. A device according to claim 6 wherein the location means for the flexible hose is a channel formed around the periphery of the device removed from the cylinder and said channel is of a size to allow part of the hose to lie therein.
- 9. A device according to claim 8 wherein the location means includes retaining means to retain the hose in position.
- 10. A device according to any of the preceding claims wherein the device includes a clip arrangement which allows a first loop of the hose to be held in one of the clips and a second loop of the hose to be held in a second clip thereby maintaining the hose in a clipped loop form for storage.
- 11. A device according to any of the preceding claims wherein the device includes location means for the power cable thereon and /or location means for the prongs of the plug attached to the cable.
- 12. A device according to any of the preceding claims wherein the device is provided as an integral part of the moulding of the vacuum cleaner cylinder body.
- 13. A device according to any of claims 1-11 wherein the device is provided to be fitted to the cylinder body.
- 14. A device according to claim 13 wherein the device is provided with an engaging band which passes around the cylinder to connect

with the device at the other side or alternatively two bands can be provided which can be joined by a releasable clasp.

- 15. A device according to claim 14 wherein the band can be any of rubber, steel or plastics material and can be joined by a clasp or a toggle lock.
- 16. A device as hereinbefore described with reference to the accompanying drawings.









Application No: Claims searched: GB 9516109.7

1 - 5, 10 - 16.

**Examiner:** 

Justin Black

Date of search:

19 November 1996

## Patents Act 1977 Search Report under Section 17

#### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed:O): A4F

Int Cl (Ed.6): A47L (9/00, 5/28)

On - line: WPI Other:

## Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	GB 1439472	(HOOVER LIMITED). See page 2 lines 28 - 30.	1 - 3, 13.
X	GB 956015	(HOOVER LIMITED). See particularly page 2 lines 65 - 69, page 2 lines 35 - 39, and Figure 4.	X: 1 - 6, 10, 13.
X	GB 406244	(MCCARDLE). See particularly page 1 lines 57 - 67.	X: 1 - 3, 13.
X, Y	GB 337319	(ELECTROLUX LIMITED). See particularly page 2 lines 36 - 42, page 1 lines 13 - 16, page 1 lines 98 - 106, page 2 lines 21 - 25, and Figure 3.	X: 1, 2, 3, 10, 13. Y: 14, 15.
Y	GB 431014	(FITCH). See page 1 lines 67 - 70, and figure 2.	14, 15.

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